

**UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

UNIVERSAL CONNECTIVITY
TECHNOLOGIES INC.,

Plaintiff,

v.

LENOVO GROUP LIMITED,

Defendant.

Case No. 2:23-cv-00449-JRG

JURY TRIAL DEMANDED

**PLAINTIFF UNIVERSAL CONNECTIVITY TECHNOLOGIES INC.'S
OPENING CLAIM CONSTRUCTION BRIEF**

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Plaintiff Universal Connectivity Technologies Inc. (“UCT”) submits this opening claim construction brief concerning U.S. Patent Nos. 7,154,905 (“the ’905 Patent”), 7,746,798 (“the ’798 Patent”), 7,856,520 (“the ’520 Patent”), 7,921,231 (“the ’231 Patent”), and 9,852,103 (“the ’103 Patent”) (collectively, the “Asserted Patents”).

I. The Component Terms

UCT’s Position	LGL’s Position
“a preemption component that signals...”, Claim 21 of the ’905 Patent:	
<p>No construction necessary. This claim term does not invoke §112(6).</p> <p>Alternatively, should §112(6) apply:</p> <p>Function: “signals the transmission component to stop transmitting the first packet, transmits a preempt indicator indicating that a second packet is to be transmitted, transmits the second packet, and signals the transmission component to continue transmitting the first packet”</p> <p>Corresponding structure: “20:3-25, Fig. 13 and 20:31-37, Fig. 14 and 20:50-67, and equivalents thereof”</p>	<p>Subject to 35 U.S.C. § 112, ¶6</p> <p><i>Function:</i> [i] signaling the transmission component to stop transmitting the first packet, [ii] transmitting a pre-empt indicator indicating that a second packet is to be transmitted, [iii] transmitting the second packet, and [iv] signaling the transmission component to continue transmitting the first packet</p> <p><i>Structure:</i> (none)</p> <p>Indefinite</p>
“an identification component that identifies...”, Claim 19 of the ’798 Patent:	
<p>No construction necessary. This claim term does not invoke §112(6).</p> <p>Alternatively, should §112(6) apply:</p> <p><i>Function:</i> “identifies a packet type of a packet of symbols”</p> <p><i>Corresponding structure:</i> “8:31-33, 9:12-22, 15:4-8, 15:12-14, Fig. 10 and 18:46-57, Fig. 11 and 18:58-19:10, and equivalents thereof”</p>	<p>Subject to 35 U.S.C. § 112, ¶6</p> <p><i>Function:</i> identifies a packet type of a packet of symbols</p> <p><i>Structure:</i> (none)</p> <p>Indefinite</p>

A. The Component Terms Do Not Invoke 35 U.S.C. § 112(6)

The Court should reject LGL’s means-plus-function and indefiniteness arguments. Neither of the Component Terms include the language “means for.” Accordingly, the presumption is that

§ 112 ¶ 6 is *not* invoked. *See Dyfan, LLC v. Target Corp.*, 28 F.4th 1360, 1365 (Fed. Cir. 2022). LGL bears the burden of overcoming this rebuttable presumption by a preponderance of the evidence, which it cannot do. *Id.* at 1367.

Courts in this District have explained, “[t]he word ‘component’ is not a ‘nonce’ word, but rather a common English language word that bears a structural connotation.” *Lodsys, LLC v. Brother Int’l Corp.*, No. 2:11-CV-00090-JRG, 2013 WL 2949959, at *43 (E.D. Tex. June 14, 2013) (holding term “component capable of managing the interactions of the users...” not subject to § 112(6)). The term “‘component’ carries a common structural connotation ... i.e., dictionary definitions for ‘component,’ ... indicate that ‘component’ refers to structure.” *Id.*; *see also* Ex. 1 (“Madisetti Decl.”) ¶¶ 48, 63 (including dictionary definition of “component”).

Here, the ’905 and ’798 Patent claims, specification, and prosecution histories confirm that the Component Terms are not “nonce” terms and have structural meaning. *See, e.g., E2E Processing, Inc. v. Cabela’s Inc.*, No. 2:14-CV-36-JRG-RSP, 2015 WL 4051423, at *3-8 (E.D. Tex. July 2, 2015) (rejecting “selector component,” “adapter component,” and “integration component” “are means-plus-function terms governed by 35 U.S.C. § 112, ¶ 6.”); *CoreLogic Info. Sols., Inc. v. Fiserv, Inc.*, No. 2:10-CV-132-RSP, 2012 WL 4355394, at *8 (E.D. Tex. Sept. 21, 2012) (holding “model development component” term “is not governed by 35 U.S.C. § 112, ¶ 6, and that the term should be given its plain and ordinary meaning.”); *Widevine Techs., Inc. v. Verimatrix, Inc.*, No. 2-07-CV-321, 2009 WL 3734106, at *16 (E.D. Tex. Nov. 4, 2009) (“The Court finds that the claim provides sufficient structure to ‘component,’ ... and is therefore not governed by 35 U.S.C. § 112(6).”).

B. The Claims Detail The Structural Nature Of The Component Terms

The ’905 and ’798 Patent claims delineate the “preemption component” and “identification

component” as structural components that interact with other structural elements. For example, claim 21 of the ’905 Patent provides:¹

21. A communications device for transmitting packets via a communications link, comprising:

a transmission component that transmits a first packet; and

a **preemption component** that signals the transmission component to stop transmitting the first packet, transmits a preempt indicator indicating that a second packet is to be transmitted, transmits the second packet, and signals the transmission component to continue transmitting the first packet;

wherein packets include in-band symbols and the indicators include one or more out-of-band symbols.

Claim 19 of the ’798 Patent provides:

19. A communications device for transmitting packet types of packets, comprising:

an **identification component** that identifies a packet type of a packet of symbols; and

a transmission component that transmits a synchronization symbol that corresponds to the identified packet type, the transmitted synchronization symbol providing synchronization information and each packet type having a different synchronization symbol and permitting an external receiving node to properly align with a synchronization primitive to be correctly aligned on a symbol boundary, and that transmits the symbols of the packet.

Both claims 19 and 21 are directed to a “communications device” that comprises a “transmission component” and either a “preemption component” or “identification component.” Notably, LGL does not contend that the recited “transmission component” invokes § 112(6) and is indefinite for lacking any corresponding structure. The claims detail how the different structural components (such as the “preemption component” or “identification component”) interact with the structural “transmission component” to provide the claimed functionality of the “communications device.”

¹ All emphasis added unless stated otherwise.

See, e.g., Inventio AG v. ThyssenKrupp Elevator Ams. Corp., 649 F.3d 1350, 1359 (Fed. Cir. 2011) (holding “modernizing device” denoted sufficient structure based on surrounding claim language that “delineate the components that the modernizing device is connected to, describe how the modernizing device interacts with those components, and describe the processing that the modernizing device performs”); Madisetti Decl. ¶¶ 48, 63.

The body of the claims sets forth the objectives and operations of the recited “communications device,” including the “preemption component” and “identification component.” *See CA, Inc. v. Netflix, Inc.*, No. 2:21-cv-00080-JRG-RSP, 2021 WL 5323413, at *26-29 (E.D. Tex. Nov. 16, 2021) (holding that the term “computing device” did not invoke 112(6) where the claims described the “objectives and operations of the system”). For example, claim 21 explains how the “preemption component” “signals the transmission component to stop transmitting the first packet,” “transmits a preempt indicator indicating that a second packet is to be transmitted,” “transmits the second packet,” and “signals the transmission component to continue transmitting the first packet.” In addition, claim 19 details that the “identification component” “identifies a packet type” and the “transmission component ... transmits a synchronization symbol that corresponds to the identified packet type.” As such, the claims detail the interactions of the “preemption component” and “identification component” with the structural “transmission component” within the claimed “communications device.”

C. The Specification, and Prosecution History Confirm that the Component Terms Have Structural Meaning

The structural nature of the Component Terms is detailed in the specification. *See E2E*, 2015 WL 4051423, at *6 (“the specification [] provides context as to the ‘inputs and outputs’ and how the ‘selector component’ ‘interacts with other components ... in a way that ... inform[s] the structural character of the limitation-in-question or otherwise impart[s] structure.’”). For example,

the '905 and '798 Patents explain that the recited “communications device” comprises structural components, such as in connection with Figure 2:²

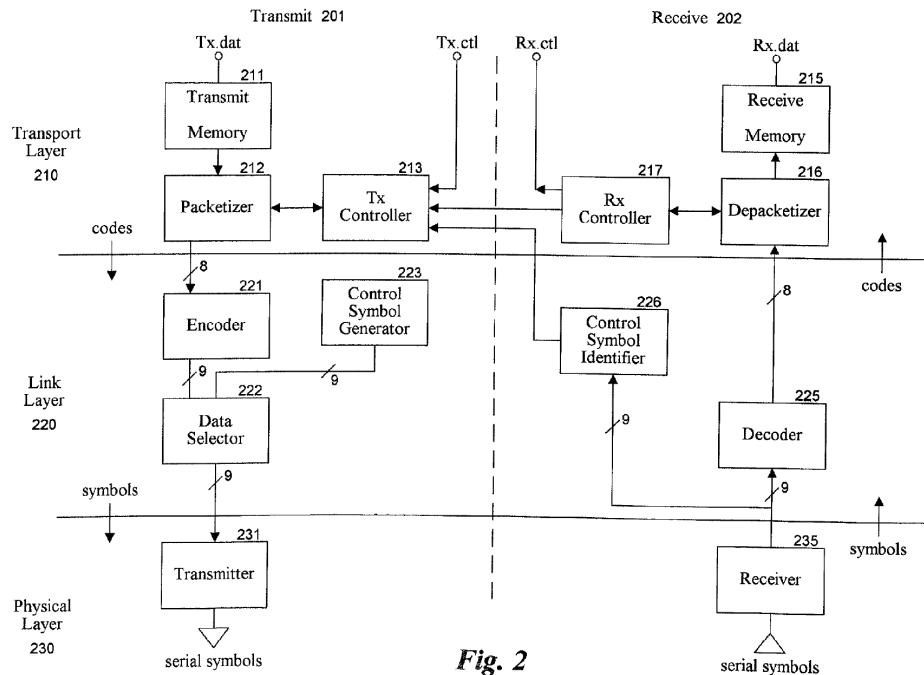


Fig. 2

FIG. 2 is a block diagram illustrating **components of the transport layer, link layer, and physical layer** in one embodiment. Each layer includes **transmit components 201 and receive components 202**. The transport layer includes transmit components, such as a transmit memory 211, a packetizer 212, and a transmit controller 213, and receive components, such as a receive memory 215, a depacketizer 216, and a receive controller 217.

'905 Patent at 9:8-15; Madisetti Decl. ¶¶ 49, 64. Figure 2 demonstrates the structural nature of the various “components of the transport layer, link layer, and physical layer,” such as “memory” and “controllers.” Madisetti Decl. ¶¶ 49, 64. Indeed, LGL previously identified “transmitter 231” in Figure 2 as a structure that corresponds to the “transmission component” recited in claim 21 of the '905 Patent and claim 19 of the '798 Patent—meaning LGL agrees that the “transmission component” refers to a structural component, such as a “transmitter.” *Id.* The “preemption

² The '905 and '798 Patents both claim priority to the same provisional application No. 60/252,724, filed on November 22, 2000. As a result, both patents are entitled to the same priority date and share the same or substantially the same specification.

component” and “identification component” refer to structural portions of the “communications device” that interact with that structural “transmission component” to provide the claimed functionality. *Id.*

The specification further delineates the “inputs and outputs” of the Component Terms. For example, the ’905 Patent details the packet preemption functionality of the “preemption component”:

When a data packet is to be preempted, the transport layer of the communications node stops providing the codes of the data packet to the link layer, signals the link layer to transmit a preempt primitive, and then starts providing the code of the control packet to the link layer for transmission as a preempting packet. When the preempting packet has been completely transmitted, the transport layer of the communications node signals the link layer to transmit a continue primitive and then resumes providing the remainder of the codes of the data packet to the link layer. The link layer of the receiving communications node detects the preempt primitive while it is receiving the codes of the data packet and signals its transport layer. The transport layer then starts storing the subsequent codes as a control packet. When the link layer detects the continue primitive, it signals the transport layer, which continues receiving the preempted data packet. The preempt and continue primitives, which are control primitives, serve to delimit transmission of a preempting packet. One skilled in the art will appreciate that packet preemption could be nested to any level. For example, a status packet might preempt a command packet that already preempted a data packet.

’905 Patent at 20:4-25; Madisetti Decl. ¶ 53. Figures 13 and 14 and their related disclosures provide additional detail on packet preemption functionality. Madisetti Decl. ¶¶ 54-56.

Similarly, the ’798 Patent provides extensive detail regarding how the recited “communications device” “identifies a packet type of a packet of symbols” as recited in claim 19. Madisetti Decl. ¶ 68. For example, the specification explains that “[w]hen receiving data, the transport layer receives the codes of transaction from the link layer and identifies the packets.” ’798 Patent at 8:31-33. The specification further states:

Immediately prior to transmitting control packet 902 (e.g., command, status, or message packets), the transport layer of the transmitting communications node signals the link layer that a control packet is to be transmitted next. The link

layer then transmits a synchronization primitive 901 encoded with a packet type of control. After the packet has been transmitted, the link layer of the transmitting communications node starts transmitting the idle primitive. **Immediately before the transport layer transmits data packet 904, it notifies the link layer that a data packet is to be transmitted.**

'798 Patent at 15:4-14; *see also id.* at 9:12-22 (“...[t]he link layer may be responsible for generating and transmitting and for receiving and identifying, control symbols, synchronization symbols, timing symbols, and so on...”); Madisetti Decl. ¶ 68. The specification also provides details on the inputs and outputs of the “identification component” in Figures 10 and 11. Madisetti Decl. ¶¶ 69-71.

Finally, the prosecution history further confirms that the Component Terms have structural meaning. Neither the Examiner nor the Applicant ever contended that either of the Component Terms were subject to §112(6). *See* Madisetti Decl. at ¶¶ 50, 65. Further, with respect to the '905 Patent, the Examiner issued a rejection to a claim containing the “preemption component” during prosecution, noting “the ‘*components*’ as claimed are discussed on page 8 lines 38+, page 8 lines 55+, and page 9 lines 8+.” *Id.* at ¶ 50 (citing Ex. 2 (Nov. 15, 2005 Non-Final Rejection) at 3). Thus, the Examiner considered the recited “preemption component” to have sufficient structure.

D. The Claims With Component Terms Are Not Indefinite

Should the Court find the presumption against 112(6) is overcome, the Court must next consider whether LGL can prove by clear and convincing evidence that the claims are indefinite for lack of corresponding structure. In this case, LGL cannot meet its burden in light of the specification’s extensive descriptions of the corresponding structure for the Component Terms, as discussed in detail above and as identified by Dr. Madisetti. Madisetti Decl. at ¶¶ 52-56, 67-71.

II. The Logic Terms

UCT's Position	LGL's Position
“logic to convert each of one or more control signals into a data packet...”, [cl. 12 of the '520 Patent] / “logic to convert each of the one or more data packets into a control signal...”, [cl. 19 of the '520 Patent]:	
<p>No construction necessary. This claim term does not invoke §112(6).</p> <p>Alternatively, should §112(6) apply:</p> <p>Function: “convert each of one or more control signals into a data packet” [cl. 12] / “convert each of the one or more data packets into a control signal” [cl. 19]</p> <p>Corresponding structure: “1:65-2:1, 3:34-37, 7:28-38, 10:3-10, Fig. 2 (214), 7:42-47, and equivalents thereof”</p>	<p>Subject to 35 U.S.C. § 112, ¶6</p> <p><i>Function:</i> convert each of one or more control signals into a data packet, each of the one or more control signals being one of a plurality of different types of control signals for a standard protocol, each data packet including a plurality of bits to be transmitted [cl. 12] / “convert each of the one or more data packets into a control signal” [cl. 19]</p> <p><i>Structure:</i> (none)</p> <p>Indefinite</p>
“logic to arbitrate use of the first control bus...”, [cl. 12 of the '520 Patent] / “logic to arbitrate use of the first control bus...”, [cl. 19 of the '520 Patent]:	
<p>No construction necessary. This claim term does not invoke §112(6).</p> <p>Alternatively, should §112(6) apply:</p> <p><i>Function:</i> “arbitrate use of the first control bus by determining whether the control bus is in use by the receiving device and, if the first control bus is not in use by the receiving device, conducting arbitration for control of the first control bus” [cl. 12] / “arbitrate use of the first control bus by determining whether the control bus is in use by the transmitting device and, if the first control bus is not in use by the transmitting device, conducting arbitration for control of the first control bus” [cl. 19]</p> <p><i>Corresponding structure:</i> “Fig. 2 (206), Fig. 3, 3:53-55, 4:60-67, 5:1-67, 7:17-28, 7:48-8:12, 8:37-39, 10:3-10, and equivalents thereof”</p>	<p>Subject to 35 U.S.C. § 112, ¶6</p> <p><i>Function:</i> to arbitrate use of the first control bus, the logic to arbitrate use being operable to: [i] determine whether the control bus is in use by the receiving device, and [ii] if the first control bus is not in use by the receiving device, conduct arbitration for control of the first control bus [cl. 12] / to arbitrate use of the first control bus, the logic to arbitrate use being operable to: [i] determine whether the control bus is in use by the transmitting device, and [ii] if the first control bus is not in use by the transmitting device, conduct arbitration for control of the first control bus [cl. 19]</p> <p><i>Structure:</i> a general-purpose processor, special-purpose processor, or logic circuit programmed with instructions to perform Steps 304-322 of Figure 3</p>

“logic to detect symbols on the cable interface...”, Claim 10 of the ’231 Patent:	
<p>No construction necessary. This claim term does not invoke §112(6).</p> <p>Alternatively, should §112(6) apply:</p> <p><i>Function:</i> “detect signals on the cable interface”</p> <p><i>Corresponding structure:</i> “2:7-10, 3:24-26, 4:13-16, 6:36-39, 7:38-44, 8:25-27, 8:55-59, 8:67-9:3, 10:35-42, Fig. 7 (706), Fig. 8 (812), 2:10-15, 3:22-24, 4:31-33, 7:47-53, 7:59- 62, 8:31-36, 8:55-58, 9:20-22, 10:35-42, Fig. 7 (712), and equivalents thereof”</p>	<p>Subject to 35 U.S.C. § 112, ¶6</p> <p><i>Function:</i> detect signals on the cable interface</p> <p><i>Structure:</i> (none)</p> <p>Indefinite</p>
“first logic to detect a voltage value on the power bus...”, Claim 10 of the ’231 Patent:	
<p>No construction necessary. This claim term does not invoke §112(6).</p> <p>Alternatively, should §112(6) apply:</p> <p><i>Function:</i> “detect a voltage value on the power bus”</p> <p><i>Corresponding structure:</i> “2:7-10, 3:24-26, 4:13-16, 6:36-39, 7:38-44, 8:25-27, 8:55-59, 8:67-9:3, 10:35-42, Fig. 7 (706), Fig. 8 (812), and equivalents thereof”</p>	<p>Subject to 35 U.S.C. § 112, ¶6</p> <p><i>Function:</i> detect a voltage value on the power bus</p> <p><i>Structure:</i> (none)</p> <p>Indefinite</p>
“second logic to detect signals on the control bus...”, Claim 10 of the ’231 Patent:	
<p>No construction necessary. This claim term does not invoke §112(6).</p> <p>Alternatively, should §112(6) apply:</p> <p><i>Function:</i> “detect signals on the control bus”</p> <p><i>Corresponding structure:</i> “2:10-15, 3:22-24, 4:31-33, 7:47-53, 7:59-62, 8:31-36, 8:55-58, 9:20-22, 10:35-42, Fig. 7 (712), Fig. 8 (812), and equivalents thereof”</p>	<p>Subject to 35 U.S.C. § 112, ¶6</p> <p><i>Function:</i> detect signals on the control bus</p> <p><i>Structure:</i> (none)</p> <p>Indefinite</p>
“logic to discover a transmitting device...”, Claim 16 of the ’231 Patent:	
<p>No construction necessary. This claim term does not invoke §112(6).</p> <p>Alternatively, should §112(6) apply:</p>	<p>Subject to 35 U.S.C. § 112, ¶6</p> <p><i>Function:</i> discover a transmitting device coupled with the receiving device</p>

<p><i>Function</i>: “discover a transmitting device coupled with the receiving device”</p> <p><i>Corresponding structure</i>: “Abstract, 1:62-65, 3:22-24, 4:24-30, 4:40-42, 7:4-9, 8:27-31, 8:55-58, 9:13-19, 10:35-42, Fig. 7 (710), Fig. 8 (832), 1:65-2:3, 3:24-26, 6:54-7:3, 7:17-21, 8:9-19, 8:55-59, 10:35-42, and equivalents thereof”</p>	<p><i>Structure</i>: (none)</p> <p>Indefinite</p>
“first logic to detect a first signal on the control bus...”, Claim 16 of the ’231 Patent:	
<p>No construction necessary. This claim term does not invoke §112(6). Alternatively, should §112(6) apply:</p> <p><i>Function</i>: “detect a first signal on the control bus”</p> <p><i>Corresponding structure</i>: “Abstract, 1:62-65, 3:22-24, 4:24-30, 4:40-42, 7:4-9, 8:27-31, 8:55-58, 9:13-19, 10:35-42, Fig. 7 (710), Fig. 8 (832), and equivalents thereof”</p>	<p>Subject to 35 U.S.C. § 112, ¶6</p> <p><i>Function</i>: detect a first signal on the control bus</p> <p><i>Structure</i>: (none)</p> <p>Indefinite</p>
“second logic to detect a power signal...”, Claim 16 of the ’231 Patent:	
<p>No construction necessary. This claim term does not invoke §112(6). Alternatively, should §112(6) apply:</p> <p><i>Function</i>: “detect a power signal from the transmitting device”</p> <p><i>Corresponding structure</i>: “Abstract, 1:65-2:3, 3:24-26, 6:54-7:3, 7:17-21, 8:9-19, 8:55-59, 10:35-42, Fig. 8 (832), and equivalents thereof”</p>	<p>Subject to 35 U.S.C. § 112, ¶6</p> <p><i>Function</i>: detect a power signal from the receiving device</p> <p><i>Structure</i>: (none)</p> <p>Indefinite</p>

A. The Logic Terms Do Not Invoke 35 U.S.C. § 112(6)

None of the Logic Terms include the language “means for.” Accordingly, the presumption is that § 112 ¶ 6 is not invoked. *See Dyfan*, 28 F.4th at 1365. LGL cannot overcome the presumption.

“Courts in this district, as well as other districts, have concluded that in many instances the word ‘logic,’ like ‘circuit’ or ‘processor,’ may connote sufficiently definite structure and is not a

‘nonce’ or ‘functional’ word that is subject to the limitations of § 112 ¶ 6.” *CDN Innovations, LLC v. Grande Commc’ns Networks, LLC*, No. 4:20-CV-653-SDJ, 2021 WL 3615908, at *11 (E.D. Tex. Aug. 13, 2021) (“‘logic’ is not a nonce word automatically subjected to the limitations of § 112 ¶ 6.”) (collecting cases); *see also TecSec, Inc. v. Int’l Bus. Machines Corp.*, 731 F.3d 1336, 1348 (Fed. Cir. 2013) (“the term ‘digital logic’ designates structure to skilled artisans—namely digital circuits that perform Boolean algebra.”). Here, the ’520 and ’231 Patent claims, specification, and prosecution histories confirm that the Logic Terms are not “nonce” terms and have structural meaning. *See Netlist, Inc. v. Samsung Elecs.*, No. 2:22-cv-00293-JRG, 2023 WL 8101855, at *12 (E.D. Tex. Nov. 21, 2023) (finding that the “logic” terms “clearly connotes *physical* structure rather than software, as the claims require the ‘logic’ to be coupled to either a printed circuit board [] or a buffer [].”).

B. The Claims Confirm The Logic Terms Have Structural Meaning

1. ’520 Patent claims

The ’520 Patent claims confirm that the Logic Terms connote structure. For example, claim 12 of the ’520 Patent recites:

12. A transmitting device comprising:

a connection to a single first control bus, the first control bus being a bi-directional, single-line bus, wherein the transmitting device is operable for coupling with a receiving device via the first control bus;

logic to convert each of one or more control signals into a data packet, each of the one or more control signals being one of a plurality of different types of control signals for a standard protocol, each data packet including a plurality of bits to be transmitted;

a transmitter, the transmitter to transmit the data packets to the receiving device on the first control bus; and

logic to arbitrate use of the first control bus, the logic to arbitrate use being operable to: determine whether the control bus is in use by the receiving device, and if the first control bus is not in use by the receiving device, conduct arbitration

for control of the first control bus, and wherein the receiving device is a device utilizing the standard protocol and the transmitting device is a mobile device utilizing a modified protocol, the modified protocol being a modification of the standard protocol that is not included in the standard protocol.

Similarly, claim 19 of the '520 Patent recites a “receiving device” comprising “a connection to a single first control bus,” “a receiver,” “logic to convert,” and “logic to arbitrate.”

The '520 Patent claims describe various structural components (such as a “single first control bus,” “transmitter,” and/or “receiver”) and their interaction with the recited “logic to convert” and “logic to arbitrate.” Madisetti Decl. ¶¶ 78, 93, 110, 125. Notably, LGL does not contest that the recited “control bus,” “transmitter,” and “receiver” elements of claims 12 and 19 are structural components. *Id.* The '520 Patent claims detail how these structural components interact with the “logic to convert” and “logic to arbitrate” to achieve the claimed functionality of the recited “transmitting device” and “receiving device.” *Id.* For example, the recited “logic” functionality is tied to structural components such as the “control bus,” “transmitter,” and “receiver.”

The body of the '520 Patent claims set forth the objectives and operations of the recited “transmitting device” and “receiving device,” including the “logic to convert” and “logic to arbitrate.” *See CDN Innovations*, 2021 WL 3615908, at *12 (“the claims describe the objectives and operations of the system, which includes a router with detection logic and blocking logic embedded in an Ethernet port.”). For example, the “logic to convert” converts the “one or more control signals into a data packet” for transmission by the “transmitter” or converts the “data packets” received by the “receiver” into a control signal. Madisetti Decl. ¶¶ 78, 110. Further, the “logic to arbitrate” “determine[s] whether the control bus is in use by the receiving device [/transmitting device]” and “conduct[s] arbitration for control of the first control bus.” *Id.* ¶¶ 93,

125. As such, the '520 Patent claims underscore the structural nature of the “logic to convert” and “logic to arbitrate.”

2. '231 Patent claims

The '231 Patent claims also confirm that the Logic Terms connote structure. For example, claim 10 of the '231 Patent recites:

10. A transmitting device comprising:

a transmitter to transmit signals to a receiving device;

a cable interface to couple with the receiving device, the cable interface including: a single-wire, bi-directional control bus, and

a power bus powered by the receiving device;

logic to detect signals on the cable interface, the logic including:

a **first logic to detect a voltage value on the power bus**, the transmitter to transition from a disconnect state to a pending state when a predetermined voltage is detected on the power bus by the first logic, the disconnect state indicating that the transmitting device is not connected to a receiving device, and

a **second logic to detect signals on the control bus**, the transmitter to drive a first signal value on the control bus periodically upon transitioning to the pending state, the transmitter to transition to a discovered state when the first signal value is detected by the second logic when the transmitter is not driving the signal value on the control bus, the discovered state indicating that the transmitter has been discovered by the receiving device.

Likewise, claim 16 recites a “receiving device” comprising “a receiver,” “an interface to be coupled with a transmitting device,” “a switchable pull down circuit on the control bus,” “logic to discover a transmitting device coupled with the receiving device,” “a first logic to detect a first signal on the control bus,” and “a second logic to detect a power signal from the receiving device.”

The '231 Patent claims describe various structural components (such as a “transmitter,” “receiver,” “interface,” and “pull down circuit”) and their interaction with the recited “logic to detect” and “logic to discover.” Madisetti Decl. ¶¶ 143, 159, 175, 191, 207, 223. Notably, LGL

does not contest that the recited “transmitter,” “receiver,” “interface,” and “pull down circuit” elements of claims 10 and 16 are structural components. The ’231 Patent claims detail how these structural components interact with the recited “logic to detect” and “logic to discover” to achieve the claimed functionality of the recited “transmitting device” and “receiving device.” *Id.* For example, the recited “logic” is tied to functionality of the structural “cable interface,” “power bus,” and “control bus.”

The ’231 Patent claims further delineate the objectives and operations of the recited “logic” terms. For example, the “logic to detect” of claim 10 relates to “signals on the cable interface,” and includes “a first logic to detect a voltage value on the power bus” and “a second logic to detect signals on the control bus.” Madisetti Decl. ¶¶ 143, 159, 175. In addition, claim 16 recites “logic to discover a transmitting device coupled with the receiving device,” including “a first logic to detect a first signal on the control bus” and “a second logic to detect a power signal from the receiving device.” *Id.* ¶ 191; *see also id.* ¶¶ 207, 223. Thus, the ’231 Patent claims detail the structural nature of the “logic to discover” and “logic to detect.”

C. The Specifications And Prosecution Histories Confirm The Logic Terms Have Structural Meaning

1. ’520 Patent

The ’520 Patent details the structural nature of the “logic to convert” and “logic to arbitrate.” As an initial matter, the ’520 Patent makes clear that the functionality of the recited “logic” may be performed by a “logic circuit”:

Various embodiments of the present invention may include various processes. These processes may be performed by hardware components or may be embodied in computer program or machine-executable instructions, which may be used to cause a general-purpose or special-purpose processor or **logic circuits** programmed with the instructions to perform the processes. Alternatively, the processes may be performed by a combination of hardware and software.

Id. at 10:3-10. A “logic circuit” refers to a class of well-known structural components, and is not

a “nonce” term subject to § 112(6). *See Apex Inc. v. Raritan Computer, Inc.*, 325 F.3d 1364, 1373 (Fed. Cir. 2003) (“the term ‘circuit’ with an appropriate identifier such as ... ‘logic,’ certainly identifies some structural meaning to one of ordinary skill in the art.”). As Dr. Madisetti explains, “a POSITA would understand that ‘logic’ in the claims refers to ‘logic circuits,’ which connotes physical structure rather than software.” Madisetti Decl. at ¶¶ 81, 96, 113, 128. Further, “[a] POSITA would understand that examples of ‘logic’ include PLDs, ASICs, FPGAs, CPLDs, and discrete electrical components, which may be designed and implemented in a hardware description language (HDL) or using schematic capture.”³ *Id.*; *see Netlist*, 2023 WL 8101855, at *12 (finding “logic” terms contain sufficient structure, which was “consistent with the specifications’ disclosure of PLDs, ASICs, FPGAs, and CPLDs as ‘logic elements.’”). As such, “[a] POSITA would have been familiar with the structure and operation of ‘logic circuits’ used to convert data packets into a control signal” or “arbitrate use of a control bus.” Madisetti Decl. at ¶¶ 81, 96, 113, 128.

Regarding the “logic to convert,” the ’520 Patent specification describes in detail how “control signals” are converted to one or more “data packets” and vice versa. ’520 Patent at 1:65-2:1; *see also id.* at 3:34-37; 7:28-38; 7:42-47. For example, the ’520 Patent explains the interaction of “control signals” and “data packets” among various structures, such as the “control bus”:

In some embodiments, the control signals are converted from bytes of data to data packets that identify the type of data within each packet. In one particular example, HDMI control signals are multiplexed together on the control bus on a byte by byte basis. For example, CEC, DDC, and private channel instructions are multiplexed together on the control bus. If there is a control signal to be transmitted 212, the signal is converted into a data packet for transmission. In an embodiment, the data packet may be a data packet as shown in FIG. 8.

³ This understanding is confirmed by numerous dictionary definitions that all demonstrate that “logic” as used in the claims refers to structure. Madisetti Decl. ¶¶ 79, 94, 111, 126, 144, 160, 176, 192, 208, 224; *see also, e.g., MIT v. Abacus Software*, 462 F.3d 1344, 1355 (Fed. Cir. 2006) (“[D]ictionary definitions establish that the term ‘circuitry,’ by itself, connotes structure.”).

'520 Patent at 7:28-38. In addition, Figure 2 and its related disclosures provide additional detail illustrating the inputs and outputs for providing control signals between a transmitting device and a receiving device. *See* Madisetti Decl. ¶ 86 (citing Fig. 2 and '520 Patent at 2:12-14). For example, Figure 2 includes step 214, which is described as “[c]onvert control signal of regular control protocol into data packet for transmission.”

In addition, the '520 Patent also details the operations of the “logic to arbitrate.” *See* '520 Patent at 3:53-55, 4:60-67, 5:1-67, 7:17-28, 7:48-8:12, 8:37-39. The '520 Patent teaches that the “logic to arbitrate” interacts with various structures, such as the “control bus.” *Id.* at 4:60-67 (“the control bus may be implemented such that ... one of the devices (generally the transmitter) will win the arbitration if both devices attempt to gain control of the control bus at approximately the same time.”). Figures 2 and 3 (and their corresponding disclosures) provide additional detail on the arbitration process. *See* Madisetti Decl. ¶¶ 102-103 (regarding claim 10); *id.* at ¶¶ 134-135 (regarding claim 19). For example, in Figure 2, step 206 is described as “[a]rbitration of control bus.” Further, Figure 3 is described as “an illustration of an arbitration process for a bi-directional, single-bit control bus.” '520 Patent at 2:12-16. To that end, the '520 Patent specification teaches the Logic Terms in a manner that connotes structure.

Finally, the prosecution history for the '520 Patent also underscores that the Logic Terms have structural meaning. For example, neither the Examiner nor the Applicant ever argued that any of the Logic Terms were subject to §112(6). Madisetti Decl. ¶¶ 82, 97, 114, 129.

2. '231 Patent

The '231 Patent specification also delineates the structural nature of the Logic Terms. Importantly, just like the '520 Patent, the '231 Patent teaches that the recited “logic” may refer to functionality implemented by a “logic circuit,” which refers to a well-known class of structures.

See '231 Patent at 10:35-42; Madisetti Decl. ¶¶ 146, 162, 178, 194, 210, 226 (“examples of ‘logic’ include PLDs, ASICs, FPGAs, CPLDs and discrete electrical components, which may be designed and implemented in a hardware description language (HDL) or using schematic capture.”); *see also Netlist*, 2023 WL 8101855, at *12. As to the '231 Patent, “[a] POSITA would have been familiar with the structure and operation of ‘logic circuits’ used to detect signals on a control bus and power bus.” Madisetti Decl. ¶¶ 146, 162, 178, 194, 210, 226.

The '231 Patent elaborates on the inputs and outputs of the “logic to detect” and “logic to discover” recited in claims 10 and 16. Regarding the “logic to detect” terms, the specification describes the interactions among various structural components—such as how signals are detected on the “cable interface,” including how voltage value is detected on the “power bus,” and how signals are detected on the “control bus.” Madisetti Decl. at ¶ 150 (citing '231 Patent at 2:7-10, 3:24-26, 4:13-16, 6:36-39, 7:38-44, 8:25-27, 8:55-59, 8:67-9:3, 10:35-42, 2:10-15, 3:22-24, 4:31-33, 7:47-53, 7:59-62, 8:31-36, 8:55-58, 9:20-22); *see also id.* at ¶¶ 166, 182.

In addition, Figures 7 and 8 provide additional detail on the process for detecting signals on the cable interface. *See* Madisetti Decl. at ¶¶ 151-152, 167-168, 183-184. Figure 7 is a “flowchart[] to illustrate an embodiment of a discovery process for connected devices.” Figure 7 includes step 706, which is described as “Transmitter detects +5V on VBUS Transmitter drives signal pulse on CBUS” and step 712, which is described as “Transmitter detects CBUS low when not pulsing Discovery by receiver Stop pulsing CBUS.”

Figure 8 is “an illustration of an embodiment of a mobile device coupled with a standard device via a control bus”:

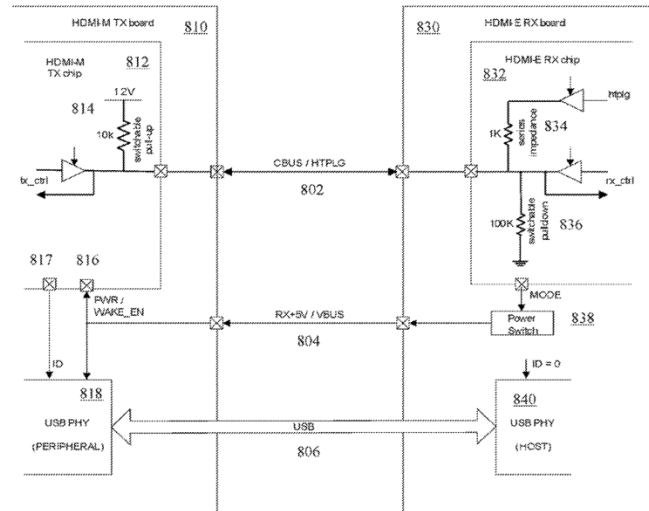


Fig. 8

In connection with Figure 8, the '231 Patent explains that “the HDMI-M transmitter chip 812 and HDMI-E receiver chip 832 include logic to detect signals on the control bus 802, as well as logic to detect power signals sent via the VBUS 804 or other power connection.” *Id.* at 8:56-59; *see also, e.g., CDN Innovations*, 2021 WL 3615908, at *12 (noting “[t]he specification includes a diagram depicting how ‘logic’ is intended to be incorporated into the proposed invention.”).

As to the “logic to discover,” the '231 Patent specification details the process for discovery of electronic devices utilizing a structural “control bus,” including how signals are detected on the control bus and how power signals are detected from the transmitting device. Madisetti Decl. at ¶¶ 197-198 (citing '231 Patent at Abstract, 1:62-65, 3:22-24, 4:24-30, 4:40-42, 7:4-9, 8:27-31, 8:55-58, 9:13-19, 1:65-2:3, 3:24-26, 6:54-7:3, 7:17-21, 8:9-19, 8:55-59). Figures 7 and 8 and their related disclosures also provide additional detail on the process for discovery of electronic devices using a control bus. *See* Madisetti Decl. at ¶¶ 199-200, 215-216, 230-231.

Finally, the prosecution history for the '231 Patent also underscores that the Logic Terms have structural meaning. For example, neither the Examiner nor the Applicant ever argued that any of the Logic Terms were subject to §112(6). Madisetti Decl. ¶¶ 147, 163, 179, 195, 211, 227.

D. The Logic Terms Are Not Indefinite

Should the Court find the presumption against § 112 ¶ 6 is overcome, the Court must next consider whether LGL can prove by clear and convincing evidence that the claims are indefinite for lack of corresponding structure. In this case, LGL cannot meet its burden in light of the specification's extensive descriptions of the corresponding structure for the Logic Terms as discussed in detail above and as identified by Dr. Madisetti. Madisetti Decl. at ¶¶ 84-87, 100-04, 116-19, 132-136, 149-153, 165-69, 181-85, 197-201, 213-17, 229-232.

III. “in-band symbols” and “out-of-band symbols” ('905 Patent claims 1, 8, 15, 21; '798 Patent claims 20, 21)

Term	UCT's Proposed Construction	LGL's Proposed Construction
“in-band symbols”	“a symbol normally appearing in a packet (i.e. for encoding data) ”	“a symbol normally appearing in a packet”
“out-of-band symbols”	“a symbol not normally appearing in a packet (i.e. for encoding synchronization or control information) ”	“a symbol not normally appearing in a packet”

While the parties agree on the first portion of the language in the constructions, the Court should include UCT's parentheticals “(i.e. for encoding data)” and “(i.e. for encoding synchronization or control information)” for clarification. Specifically, the explanatory parentheticals tie the claim terms to the claimed inventions. Without the parentheticals, LGL's construction is ambiguous and likely to be misinterpreted by the jury.

The specification confirms that “in-band symbols” encode data and “out-of-band symbols” encode synchronization or control information. '905 Patent at 7:2-6 (“out-of-band symbols to transmit control information”); 11:49-12:11 (“control information is encoded as out-of-band symbols”); 15:39-49 (describing control primitives and synchronization primitives as “out-of-band symbols”); 17:13-22; 29:17-18. Defendants' IPR petition further confirms this

understanding based on the specification. Ex. 3 at 18-19 (“These out-of-band symbols, which encode control information.... A POSITA would have understood that the patent distinguishes these “control symbols” containing control information from the “data symbols” containing the ordinary or normal data being transmitted.”); 20 (“data packets include ‘data’ (as opposed to control information), which is the type of information that typically appears in packets.”). As such, the Court should include the explanatory parentheticals to properly clarify the meaning consistent with the specification.

IV. “synchronization primitive” (’798 Patent claims 11, 19, 28)

UCT’s Proposed Construction	LGL’s Proposed Construction
No construction necessary. Plain and ordinary meaning. Alternatively, “a sequence of <u>one or more</u> out-of-band synchronization symbols”	“a sequence of <u>two</u> out-of-band synchronization symbols”

LGL cannot identify any disclaimer or lexicography that justifies limiting the term “synchronization primitive” to specifically “two” out-of-band symbols. *See Toshiba Corp. v. Imation Corp.*, 681 F.3d 1358, 1369 (Fed. Cir. 2012) (“Absent disclaimer or lexicography, the plain meaning of the claim controls.”). LGL relies on language in the specification that describes an exemplary embodiment, but other embodiments confirm that a “synchronization primitive” can be a single out-of-band symbol. Accordingly, should the Court decide that an articulation of the plain and ordinary meaning is necessary, UCT proposes that the plain and ordinary meaning is “a sequence of one or more out-of-band synchronization symbols.”

First, the claims themselves confirm that a “synchronization primitive” is not limited to specifically “two” symbols. Dependent claims 9, 18, and 28 (which depend on the respective independent claims) of the ’798 Patent recite “wherein the **synchronization primitive** is made up of a sequence of bit-string synchronization symbols.” The dependent claims are open-ended

as to the precise number of “synchronization symbols”—meaning that the “synchronization primitive” could be made up of 1, 2, 3, or more “synchronization symbols.” Thus, LGL’s construction would improperly limit the independent claims in a manner that is directly contradicted by the open-ended nature of the dependent claims.

Second, LGL’s construction would improperly exclude embodiments taught in the specification where a “synchronization primitive” is a single out-of-band symbol. *See, e.g., Kaufman v. Microsoft Corp.*, 34 F.4th 1360, 1372 (Fed. Cir. 2022) (“A claim construction that excludes a preferred embodiment is rarely, if ever correct and would require highly persuasive evidentiary support.”). For example, the specification teaches that “[a]n IDLE primitive may be a synchronization primitive.” ’798 Patent at 15:3-4. The specification further teaches that the IDLE symbol may be one or more out-of-band symbols. *Id.* at 11:46-56 (“In one embodiment, an IDLE symbol is an out-of-band symbol.... In one embodiment, a IDLE symbol is actually a sequence of two out-of-band symbols....”). Accordingly, the specification teaches different embodiments where a “synchronization primitive” may be one or more out-of-band symbols, and LGL’s construction would improperly exclude these embodiments.

Moreover, the specification makes clear that the embodiments utilizing two out-of-band symbols are exemplary. There are no “words or expressions of manifest exclusion or restriction” in the specification. *Apple Inc. v. Wi-LAN Inc.*, 25 F. 4th 960, 967 (Fed. Cir. 2022) (“Embodiments in the specification—even if there is only one embodiment—cannot limit the scope of the claims absent the patentee’s words or expressions of manifest exclusion or restriction.”). For example, in the context of the IDLE embodiment discussed above, the specification confirms that the “two out-of-band symbols” is in the context of “one embodiment”

that is used “to exchange control information” (as opposed to synchronization information).⁴ ’798 Patent at 11:54-60. As another example, the “two out-of-band symbols” embodiment discussed in the context of Figure 22 is described as “a diagram illustrating the format of a primitive **in one embodiment.**” *Id.* at 5:33-34; 25:63-64; *see also* 36:65-37:3 (“although specific embodiments of the invention have been described herein for purposes of illustration...the invention is not limited, except as by the appended claims.”). In this context, it is apparent that the patentee is not providing a definition for the term “synchronization primitive” for the first time in column 25 in the context of one figure that is taught as simply one embodiment of a primitive. This is especially true where the specification distinguishes between “control primitives” and “synchronization primitives.” In context, the description of this embodiment does not satisfy the exacting standard for lexicography, especially in light of the prior IDLE embodiment using a single out-of-band symbol. *Apple*, 25 F. 4th at 967 (“To act as its own lexicographer, a patentee must clearly set forth a definition of the disputed claim term other than its plain and ordinary meaning and must clearly express an intent to redefine the term.”); *Hill-Rom Servs., Inc. v. Stryker Corp.*, 755 F.3d 1367, 1371 (Fed. Cir. 2014) (“The standards for finding lexicography and disavowal are exacting.”). Thus, the claims are not limited to embodiments with precisely “**two**” out-of-band symbols.

⁴ The specification makes clear that “control primitives” and “synchronization primitives” are not necessarily identical and may have different formats. ’798 Patent at 16:52-53 (“The synchronization primitives are distinct from the control primitives.”); 15:33-17:64 (describing “control primitives” with respect to Tables 1 and 2 and “synchronization primitives” with respect to Tables 3 and 4).

V. “synchronization symbol” (’798 Patent claims 11, 19, 20, 22, 28)

UCT’s Proposed Construction	LGL’s Proposed Construction
No construction necessary. Plain and ordinary meaning.	“a symbol for coordinating events that is separate from the corresponding packet itself”

In an effort to reduce the number of disputes for the Court, UCT agrees that “synchronization symbol” in claims 11, 19, 20, 22, and 28 of the ’798 Patent means “a symbol for coordinating events that is separate from the corresponding packet itself.”

VI. “periodically” (’231 Patent claim 10)

UCT’s Proposed Construction	LGL’s Proposed Construction
No construction necessary. Plain and ordinary meaning. Alternatively, “occurring in regular, repeated cycles or irregular intervals of time”	“occurring in regular, repeated cycles”

LGL cannot identify any disclaimer or lexicography that justifies limiting the plain and ordinary meaning of the common English word “periodically” to exclude the full scope of its ordinary meaning which includes “irregular intervals of time.” Ex. 4 (defining “periodically” as “at irregular intervals of time; intermittently”); Ex. 5 (defining “periodically” as “from time to time”); Ex. 6 (defining “periodically” as “from time to time, occasionally”).

First, claim 10 uses the term consistent with its plain and ordinary meaning and does not include any limitation on the timing or regularity of the “first signal value.”

Second, the specification does not use the term “periodically” so there is no definition or disclaimer. While the specification describes various embodiments, nothing in the specification limits claim 10 or the term “periodically” to those embodiments or requires any limitation on the timing or regularity of the “first signal value.” For example, the specification describes embodiments where the timing varies from 1ms to 100us. ’231 Patent at 4:19-23; 7:28-46; 9:7-22. The fact that each embodiment provides for different signal timing confirms that the claims

are not limited to the embodiments or any specific timing. Indeed, the specification repeatedly states that the claims are not limited to these embodiments. *Id.* at 10:25-30; 10:61-11:4; 11:20-42. The specification also describes other embodiments without any timing limitation, which further confirms that the claims are not limited to any specific timing or regularity. *Id.* at 2:4-15 (“If the transmitting device is in a disconnect state and a predetermined voltage is detected on the power bus, the transmitting device is transitioned to a pending state and **the control line is driven with a signal pulse.**”).

In light of the claim language and specification, this case is just like *Freedom Wireless, Inc. v. Alltel Corp.*, where the Court held that the claim term “periodic” included “irregular intervals” and rejected the defendant’s proposed construction seeking to limit the term to “regular intervals.” No. 2:06-CV-504 (TJW-CE), 2008 WL 4647270, at *11 (E.D. Tex. Oct. 17, 2008) (“The defendants contend that the ‘periodic’ validating must occur at regular intervals, as described in the specification. ’823 Patent, 4:23–25. Despite this exemplary passage in the specification, the claim language is broad enough to include validation at irregular intervals. In light of Phillips’ directive that limitations from the embodiments should not be read into the claims, the court concludes that the plaintiff’s proposed construction is closer to correct. The court construes periodically to mean ‘from time to time.’”); *see also Luminati Networks Ltd. v. Code200, UAB*, No. 2:19-CV-00396-JRG, 2021 WL 425101, at *20 (E.D. Tex. Feb. 8, 2021) (“[T]he timing of the periodic communication is not critical and thus allows for both regular-interval and irregular-interval periodic communication.”); *Canon, Inc. v. TCL Elecs. Holdings Ltd.*, No. 2:18-CV-546-JRG, 2020 WL 2098197, at *6 (E.D. Tex. May 1, 2020) (rejecting construction that “periodically repeating accessing” required “regular periods or intervals of access”).

Thus, the Court should reject LGL’s request to improperly limit the plain and ordinary meaning of the term “periodically.”

VII. “conducting arbitration for control of the first control bus” (’520 Patent claim 1)

UCT’s Proposed Construction	LGL’s Proposed Construction
No construction necessary.	“conducting a process that determines whether the first device or second device gains control of the first control bus”

In an effort to reduce the number of disputes for the Court, UCT agrees that “conducting arbitration for control of the first control bus” in claim 1 of the ’520 Patent means “conducting a process that determines whether the first device or second device gains control of the first control bus.”

VIII. “standard protocol”/ “modified protocol” (’520 Patent claims 1, 12, 19; ’231 Patent claim 18)

Term	UCT’s Proposed Construction	LGL’s Proposed Construction
“standard protocol”	No construction necessary.	“a communication protocol that was standardized as of the January 4, 2008, filing date of the ’520 Patent” “a communication protocol that was standardized as of the January 4, 2008, filing date of the ’231 Patent”
“modified protocol”	No construction necessary.	“a communication protocol that is a modification of the standard protocol and that was available as of the January 4, 2008, filing date of the ’520 Patent” “a communication protocol that is a modification of the standard protocol and that was available as of the January 4, 2008, filing date of the ’231 Patent”

LGL improperly seeks to limit the terms “standard protocol”/“modified protocol” to communication protocols that existed at the time the patents were filed. These terms, however, are not time-related and not limited to specific versions of protocols that existed at the time of the inventions.

The claims and specification use the term “modified protocol” as a relative term in comparison to a “standard protocol,” which is not inherently time-limited. The claims themselves expressly recite the relationship between the “modified protocol” and the “standard protocol”: “the modified protocol being a modification of the standard protocol that is not included in the standard protocol.” *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1314 (Fed. Cir. 2005) (“The claims themselves provide substantial guidance as to the meaning of particular claim terms.”). This understanding is confirmed by Defendants’ IPR petition:

The ’520 patent describes a **“modified protocol” as a relative term in comparison to a “standard protocol”** —a “modified protocol” being “a modification of the standard protocol that is not included in the standard protocol” that is “utiliz[ed]” by a “mobile device,” and that uses “a different cable,” such as a “mobile protocol cable,” which may be the ’520 patent’s coined “HDMI-M compatible cable,” as distinguished from “a standard protocol cable.” Ex.1001, claim 1, 4:24-31, 6:39-43, 7:4-8. **The ’520 patent describes that this need for a modified/mobile protocol arises from the difficulty of using an interface designed for a standard device with smaller devices, such as mobile devices.**

Ex. 7 at 41. Thus, the relative comparison of a “modified protocol” to the “standard protocol” concerns the modifications that are not included in the standard protocol and is not inherently time-related.

Moreover, the specification expressly confirms that while certain embodiments are described in the context of a “standard HDMI device,” the “embodiments of the invention are not limited to any particular type of data or device.” ’520 Patent at 2:54-61; *see also id.* at 10:29-39; 10:55-11:10.

Because the terms are not inherently time limited or specific to any particular industry standard, this is not a case like *BillJCo, LLC v. Cisco Sys., Inc.*, No. 2:21-CV-00181-JRG, 2022 WL 782740, at *4-5 (E.D. Tex. Mar. 14, 2022). That case involved a claim that expressly recited the “Bluetooth” standard. Under those circumstances, the Court held that the claim was limited

to the Bluetooth standards that existed at the time of the claimed invention. However, the claims of the '520 patent do not recite a specific industry standard like Bluetooth or USB. Rather, the claims recite a “modified protocol” in relation to a “standard protocol.” This contrasts with the claims of the '103 Patent that expressly recite “a universal serial bus (USB) standard.” *See infra* Section IX. As such, the Court’s precedent regarding claims that recite “Bluetooth” or “USB” standards is not applicable to the terms “standard protocol”/“modified protocol,” and they should not be limited to any particular industry standards that existed as of the filing date of the patents.

IX. “a first standard comprising a universal serial bus (USB) standard and different from a standard of the video data” ('103 Patent claims 1, 11, 21, 22)

UCT’s Proposed Construction	LGL’s Proposed Construction
No construction necessary.	“a USB communication protocol that was standardized as of the April 14, 2014, filing date of the '103 Patent”

In an effort to reduce the number of disputes for the Court, UCT agrees that “a first standard comprising a universal serial bus (USB) standard and different from a standard of the video data” in claims 1, 11, 21, and 22 of the '103 Patent means “a USB communication protocol that was standardized as of the April 14, 2014, filing date of the '103 Patent.”

X. “the first synchronization signal” ('103 Patent claim 17)

UCT’s Proposed Construction	LGL’s Proposed Construction
The Court should revise claim 17 to depend on claim 12 instead of claim 11	Indefinite

The Court should revise claim 17 to depend on claim 12 instead of claim 11. The lack of antecedent basis in claim 11 for the term “the first synchronization signal” confirms that claim 17 was intended to depend on claim 12 (not claim 11). The Court should correct the typographical error because it is evident from the face of the patent, not subject to reasonable debate based on consideration of the claim language and the specification, and the prosecution history does not

suggest a different interpretation. *See Pavo Sols. LLC v. Kingston Tech. Co.*, 35 F.4th 1367, 1373 (Fed. Cir. 2022) (“A district court may correct obvious minor typographical and clerical errors in patents.”). In light of the specification, a POSITA would understand that this was a typographical error and the only reasonable antecedent basis is found in claim 12. Madisetti Decl. ¶¶ 237-242 (quoting ’103 Patent at 2:1-16).

XI. “non-transitory computer readable storage medium storing instructions representing a digital design of a circuit” (’103 Patent claim 22)

UCT’s Proposed Construction	LGL’s Proposed Construction
No construction necessary.	Preamble limiting

In an effort to reduce the number of disputes for the Court, UCT agrees that the preamble of claim 22 of the ’103 Patent is limiting.

XII. CONCLUSION

For the foregoing reasons, UCT respectfully requests that the Court adopt its proposed construction for each of the disputed claim terms.

Dated: March 28, 2025

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing document was served via electronic service on
March 28, 2025.

/s/ Brett E. Cooper

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